SHARON GRUBAUGH

UX Design/Research Consultant

sharongrubaugh@verizon.net | (610) 864-0144

http://www.linkedin.com/in/sgrubaugh

Note

The examples which follow are a small sampling of delivered work products. To protect client confidentiality, many have had client and project names removed and photos blurred.
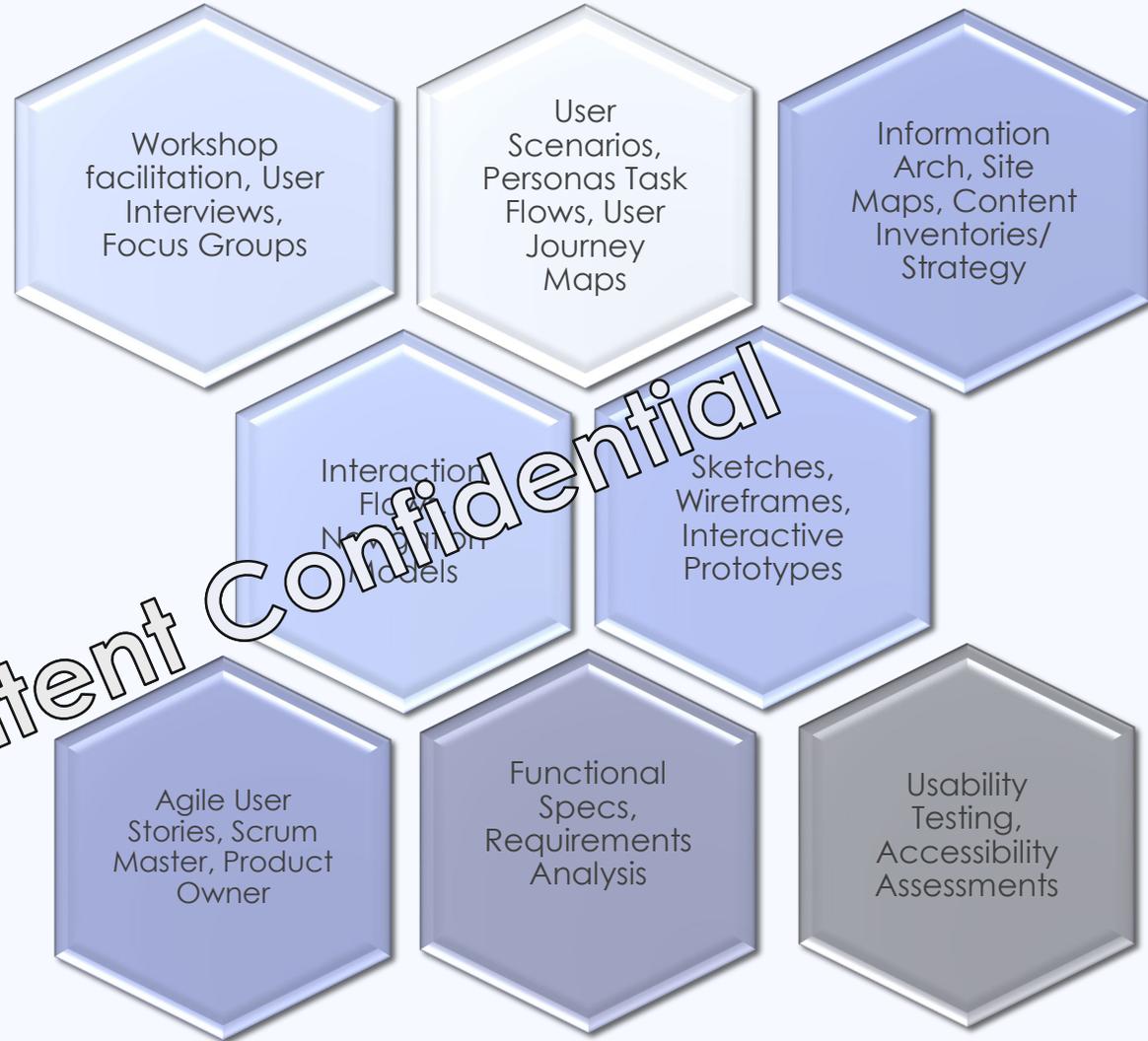
TABLE OF CONTENTS

PROCESS

My process is flexible and iterative following basic Design process.

- Discovery/Strategy - set vision, information architecture, competitive analysis, user journeys

- Research – usability analysis, content audit, ethnographic studies, user profiles

- Design – storyboarding, site map, wireframing, iterative prototyping

- Test and Iterate – heuristic evaluation, accessibility testing, usability testing

Discovery/ Strategy

Design Process

Test and Iterate

Research

Design
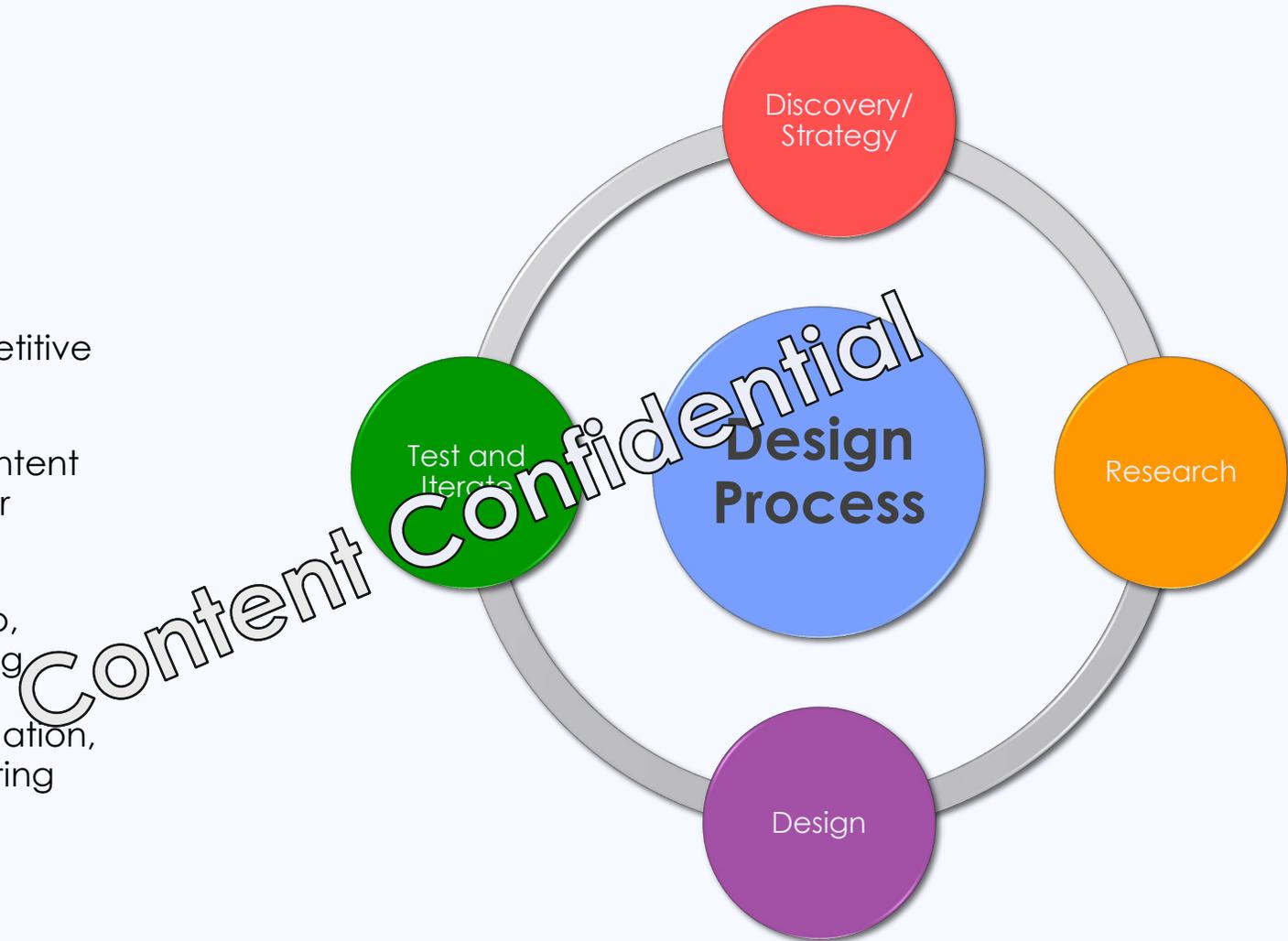
COMPETENCIES

My broad expertise and background enables abilities that support me in communicating key concepts, developing solutions and strategies while balancing user and business needs to complete business objectives within the complex business enterprise space.

Workshop facilitation, User Interviews, Focus Groups

User Scenarios, Personas Task Flows, User Journey Maps

Information Arch, Site Maps, Content Inventories/ Strategy

Interaction Flow Navigation Models

Sketches, Wireframes, Interactive Prototypes

Agile User Stories, Scrum Master, Product Owner

Functional Specs, Requirements Analysis

Usability Testing, Accessibility Assessments

Content Confidential

Business Process Reengineering Project

Goal: Multi year project to modernize and streamline primary applications with the objective of improving the efficiency, effectiveness and satisfaction of the systems that support the overall process.

Key Design Processes:
- Discovery
- Research
- Design
- Test

Project Objectives

Functionality that emphasized parity along with reduction of critical points of pain for quicker roll out for an internal group with over 10,000 users.

- Integrate applications through a single point of entry
- Improve usability of applications and user satisfaction
- Provide method for patent employees to access web based provided applications
- Improve the current workflow and status of patent applications as they flow through the system
- Support telework and collaboration of users
- Promote a common behavior across all applications

Design Role:

- Design Lead - leading team of UX designers, planning work, and providing primary interface with stakeholders
- Primary Designer and Researcher of key design areas, facilitating user research

Primary Design Responsibilities & Deliverables:

- Leading a team of UX designers to ensure products delivered on time
- Collaborating with stakeholders to identify requirements and solutions
- Working with dev team(s) and business owners in Agile environment
- Write user stories based on analysis and research into user needs
- Conducting user research to gain understanding of user needs
- Designing accessible wireframes that integrated into the enterprise application through iterative process with developers and stakeholders
- Designing and facilitating regular usability tests with end users

Background

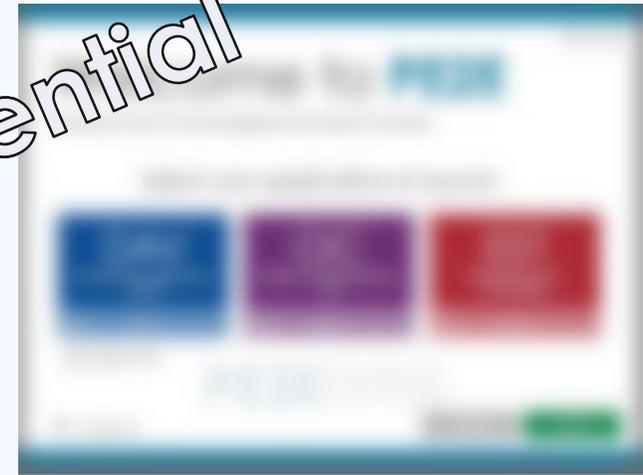Older systems had frequent crashes and were not expandable for the 10k users who relied on it every day.

The system was comprised of 3 applications

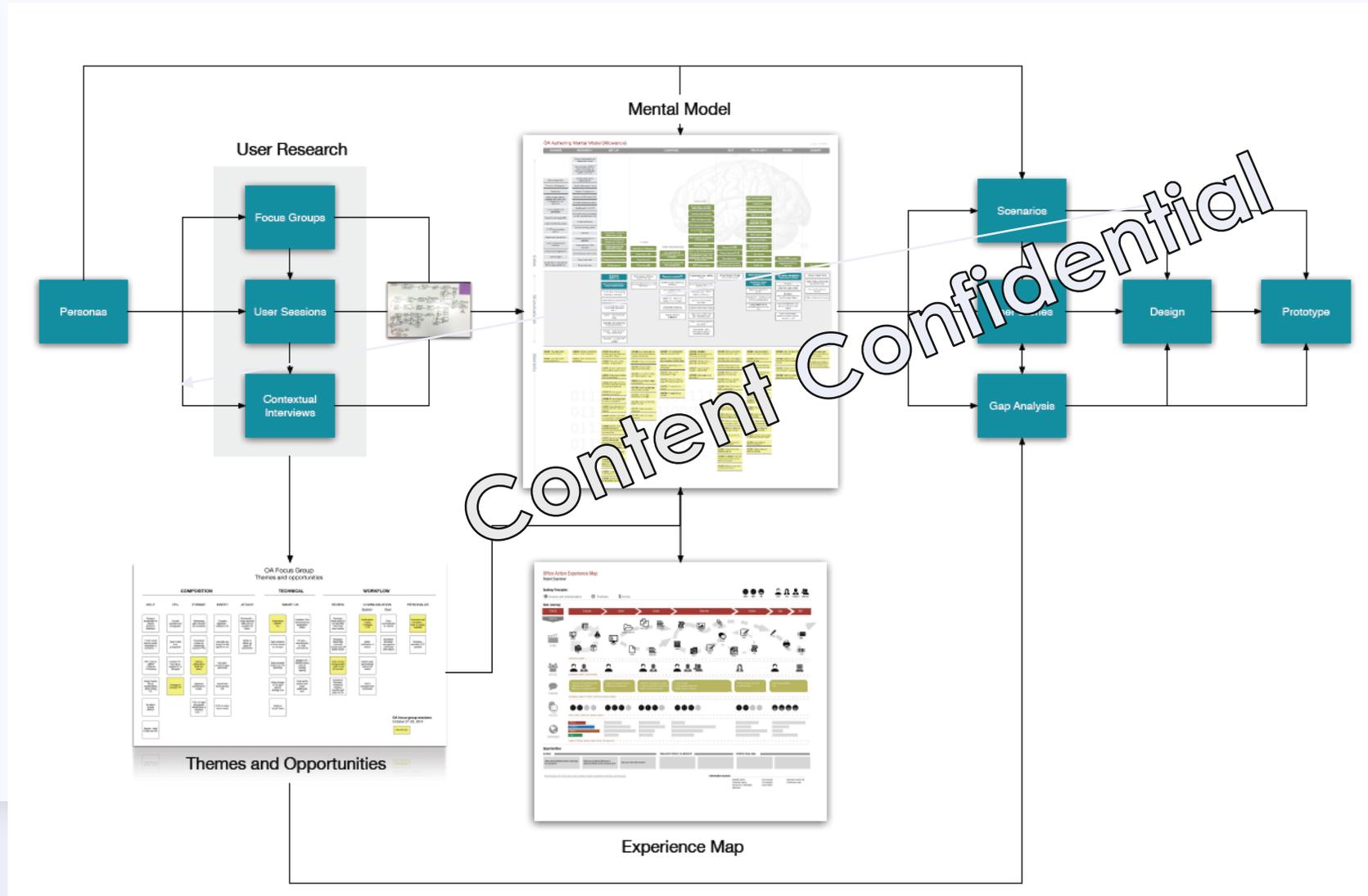Content Confidential
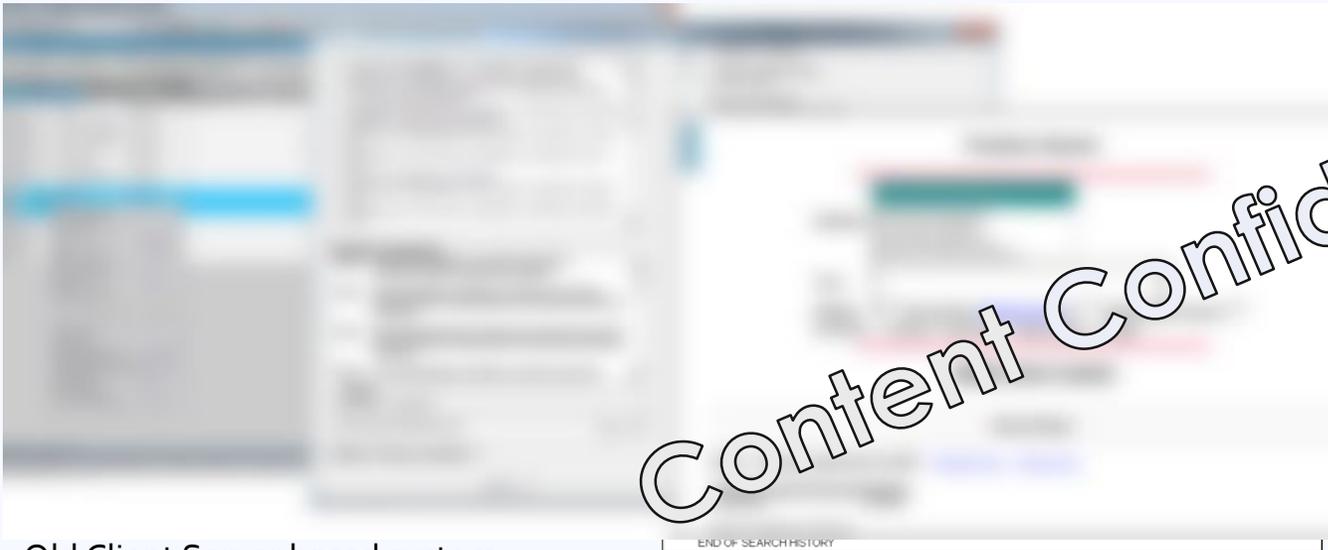
Old Client Server based system

Old Word macro based system

Old web based system

Discovery Process

Overview of research activities and products that I led and produced as result of research

Discovery Process

Mental model /journey map exercise

I facilitated a Mental Model Exercise with users to identify:

- Actions

- Needs

- Issues

- Sentiment

Discovery Process

Mental model exercise

After collecting the data, created a spreadsheet that coded the information as part of analysis process
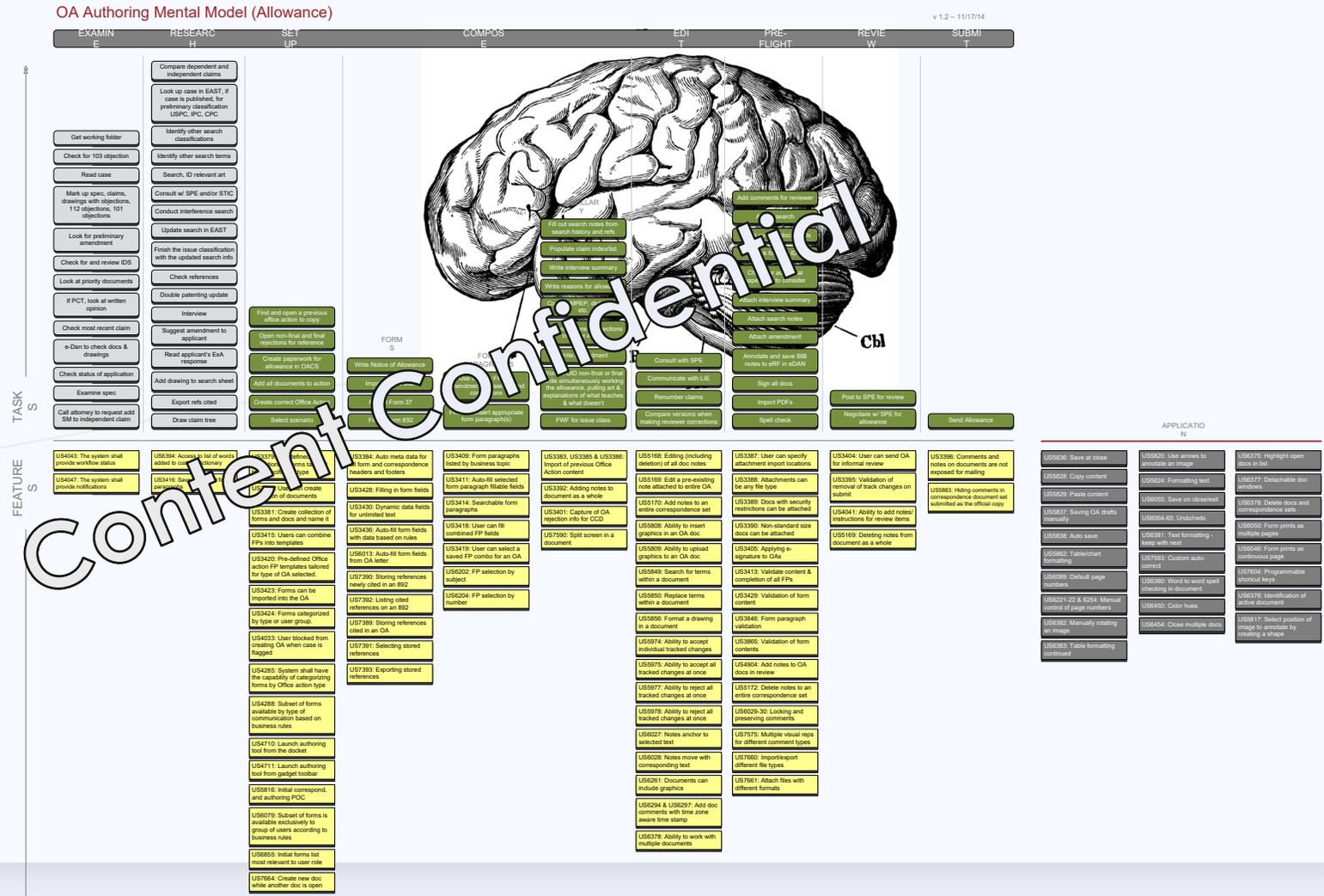
Discovery Process
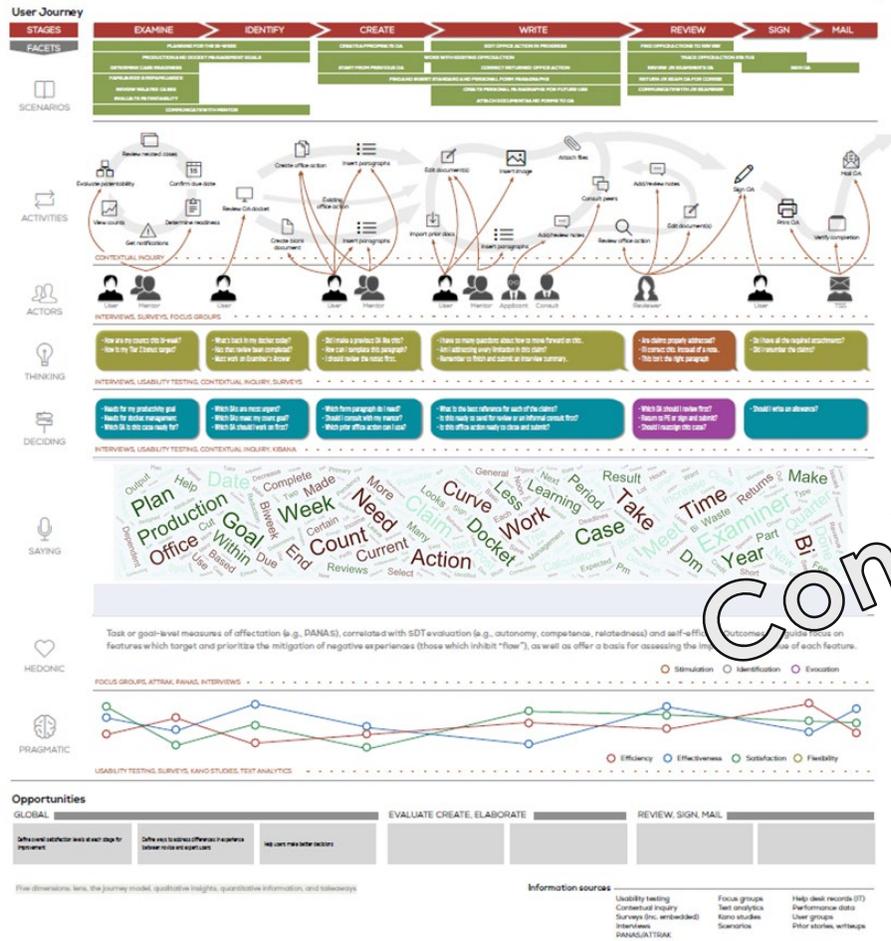
Mental model exercise

From the data:

Included the tasks/activities from the mental model exercise (top part of diagram)

Added/created user stories that aligned with the tasks in the top portion (bottom of diagram)

OA Authoring Mental Model (Allowance)

Discovery Process

User Journey Map

From the data collected in the facilitated sessions, I created a journey map based on analysis to show a holistic view of the process and understand how core functionalities fit together
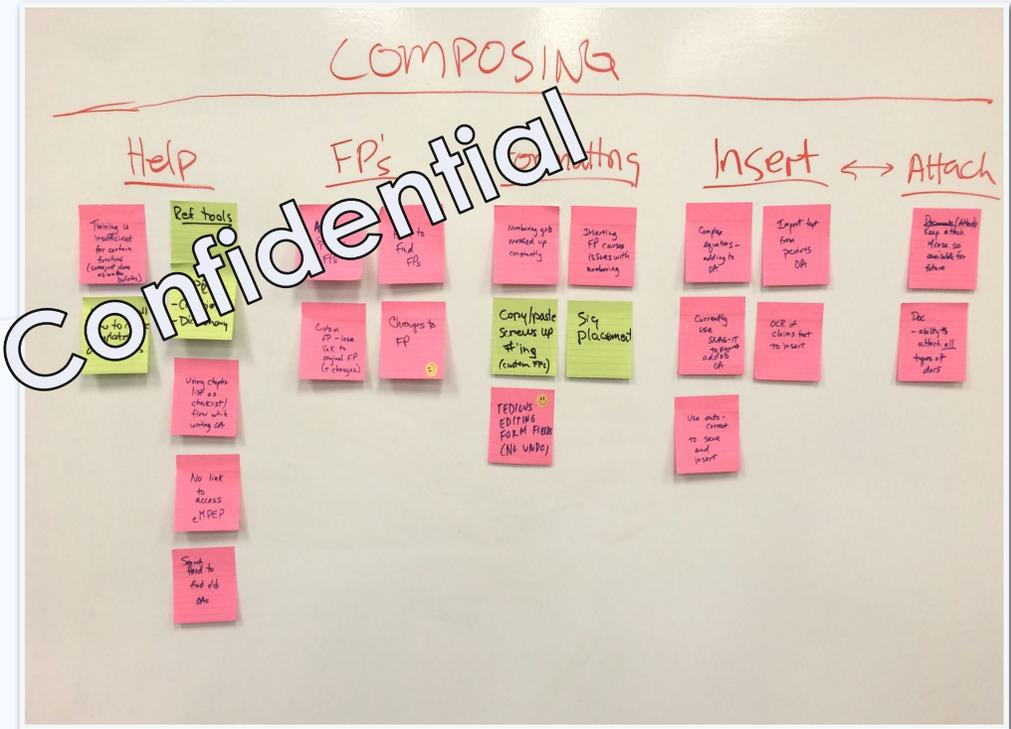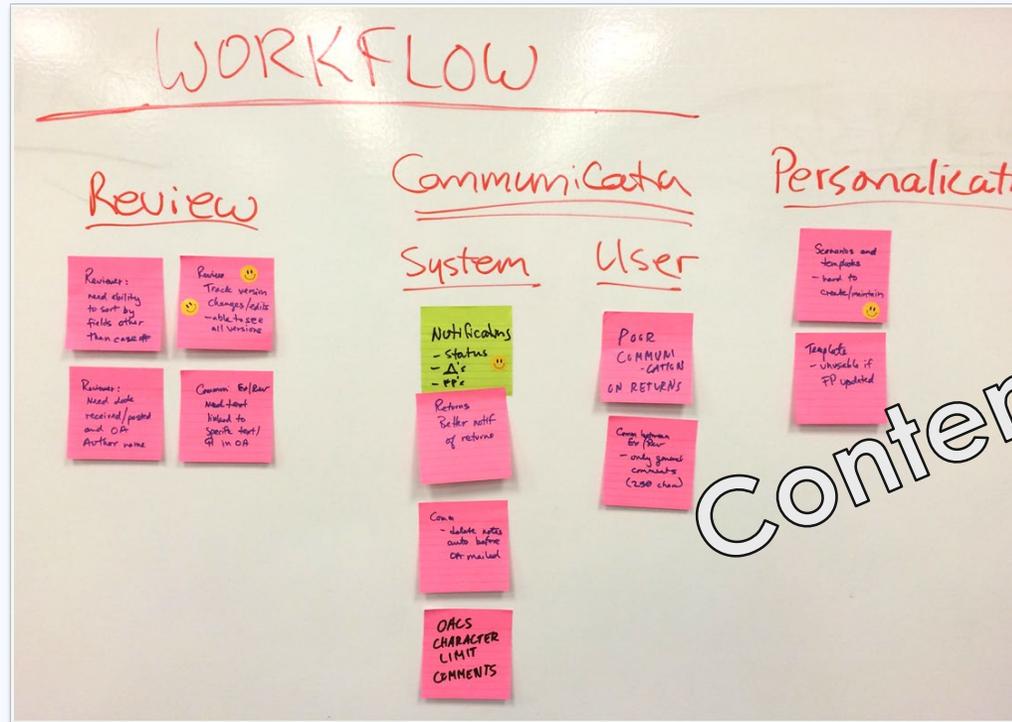
- Stages/processes

- Actors/people

- Touchpoints

- Emotional aspects (feelings, decision making. Thinking)

- Potential Opportunities

Discovery Process

Identification of Themes and Opportunities – analysis of results to identify commonality

Discovery Process

Identification of Themes and Opportunities

- From the facilitated focus group sessions - I identified some common themes/issues discussed by users

- Then I organized results into logical areas and distinguished the opportunities with the largest impact to users

OA Focus Group
Themes and opportunities

COMPOSITION

HELP	FPs	FORMAT	INSERT	ATTACH
Timing is insufficient for certain functions (bulletins)	Art unit specific form paragraphs	Numbering gets messed up constantly	Complex equations – adding to OA	Documents – keep attached with case so available for future
"I can't recall how to create templates or scenarios…"	Hard to find form paragraphs	Copy/paste screws up numbering (custom FPs)	Currently use Snag-it to add figures to OA	Ability to attach _all_ types of documents
REF TOOLS • MPEP • Citations • Dictionary	Custom FP – lose link to original FP (+ changes)	Tedious editing form fields (no undo)	Use auto-correct to save and insert	
Using chapter list as checklist/flow while writing OA	Changes to standard FP	Signature placement is erratic	Import text from previous OA	
No link to access eMPEP		"OAs as legal documents should have a standard look…"	OCR of claims text to insert	
Search – hard to find old OAs				

TECHNICAL

SMART OA	
Automation SMART OA	Available c..'s determine.. applicati.. ..
A..	C.. type – need favorite or "true" common list
Auto-populate forms, e.g. OA Summary	Validate OA – identify issues prior to posting/ signing
Allow change of OA type without starting over	Track which claims have been addressed auto
Ability to "recall" items	

...FLOW

REVIE..	COMMUNICATION		PERSONALIZE
	System	*User*	
..viewer: .. ability to sort by fields other than case number	Notifications • Status • Changes • FPs	Poor communicatio on returns	Scenarios and templates – hard to create/ maintain
Reviewer: Need date received/ posted and OA author name	Better notification of returns	Examiner/ Reviewer: only general comments (250 chars)	Template – unusable if FP updated
Track version changes/edits – able to see all versions	Delete notes automatically before OA mailed		
Examiner/ Reviewer: Need text linked to specific text/ para. in OA	OACS character limit comments		

OA focus group sessions
October 21-29, 2014

FAVORITED

Research Process

Facilitated regular user sessions to drill down and document detailed process flows and scenarios

Track status of office actions that have been sent to review

Detailed process flows provided a means to gain understanding and agreement on current system and user processes and decision points.

Scenario documents represented a robust understanding of a specific user task informed by a variety of user research activities

User session notes capture feedback, task clarifications, and other insights that provides the valuable information to support design activities

Design Process

My design concepts/wireframes started with the results of research findings.

- I used the process flows that I created as a means to gain understanding and agreement with the users and stakeholders on current system and user processes

- Notes from my user session captured user feedback, task clarifications, and other insights from users to support my design activities

- On each user story I reviewed the requirements with the business owner to identify interface and logic specifics before commencing design. The wireframes were created to integrate seamlessly with the established look and feel of the application.   Reviewed with the dev team and accessibility teams prior to seeking approval.

- When new or complex pieces were needed to be reviewed with client, a prototype was used to communicate with client the concepts and get buy-in.

Once I had a good background on the area, I would identify key components and do rough sketching.

I designed each page to leverage the newly updated taxonomy which was based on topics rather than organization divisions. Together, they enabled improved browsing and searching activities.

# *Design Process*

Example Design – Map of Related

- A family (or Continuity Data) Map is an augmented display of patent application continuity data.

- It shows the relationship of the current application being viewed with other applications in the system.

- The types of applications and status of each application, filing date and relationship are part of the map being displayed .

- The new page needed to be able to display the information in a graphical depiction as well as provide the same information (for accessibility purposes) in text format.
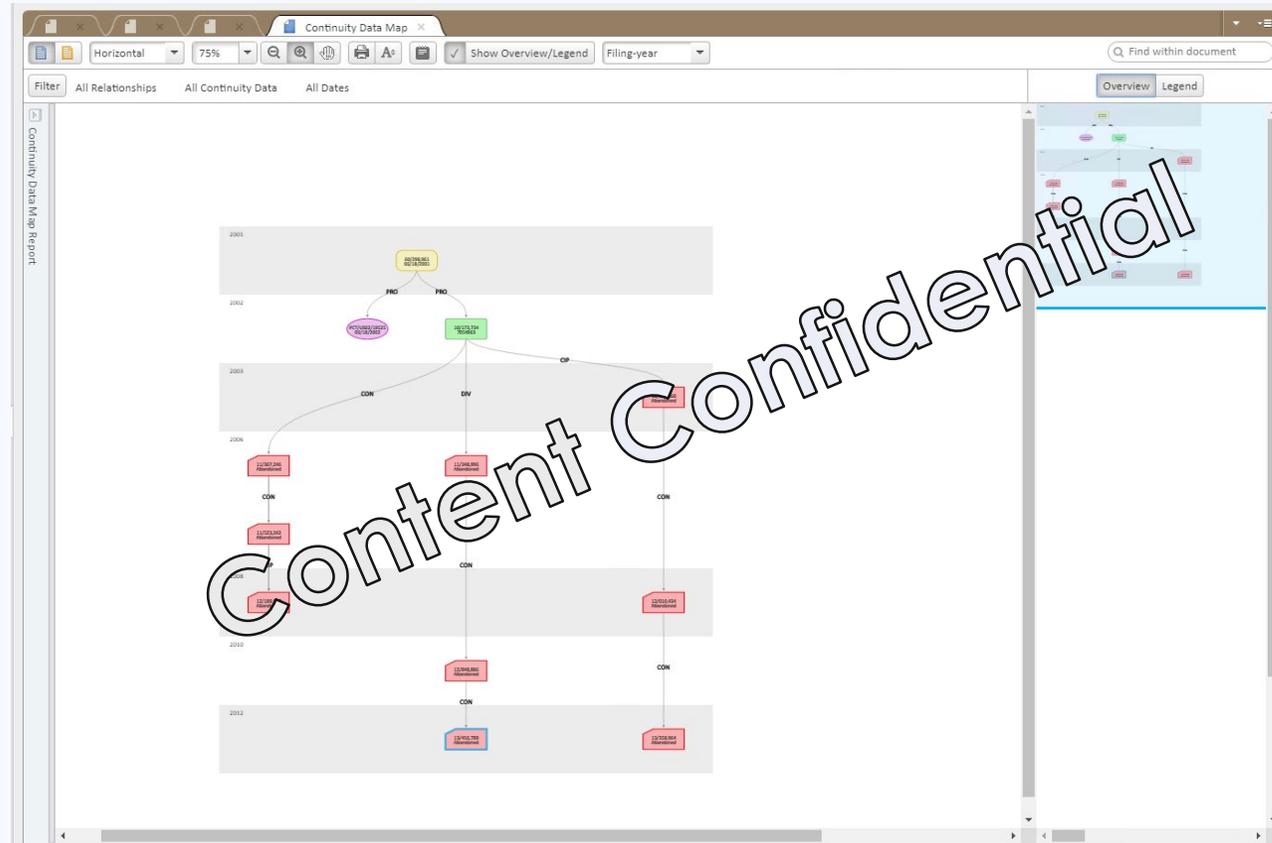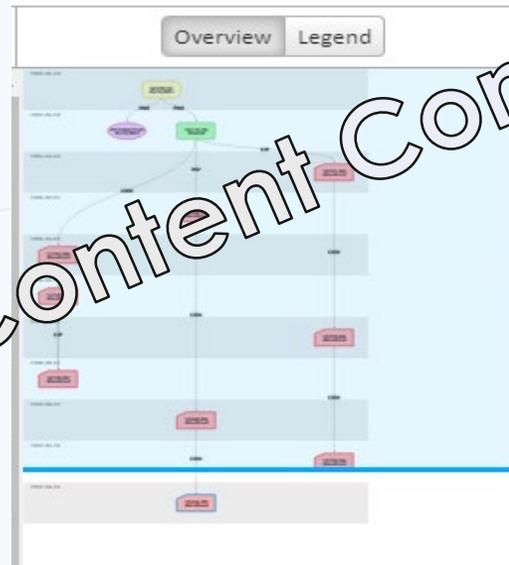
Key design elements of design

Filtering

- Focuses on only the relevant part of map based on key attributes:
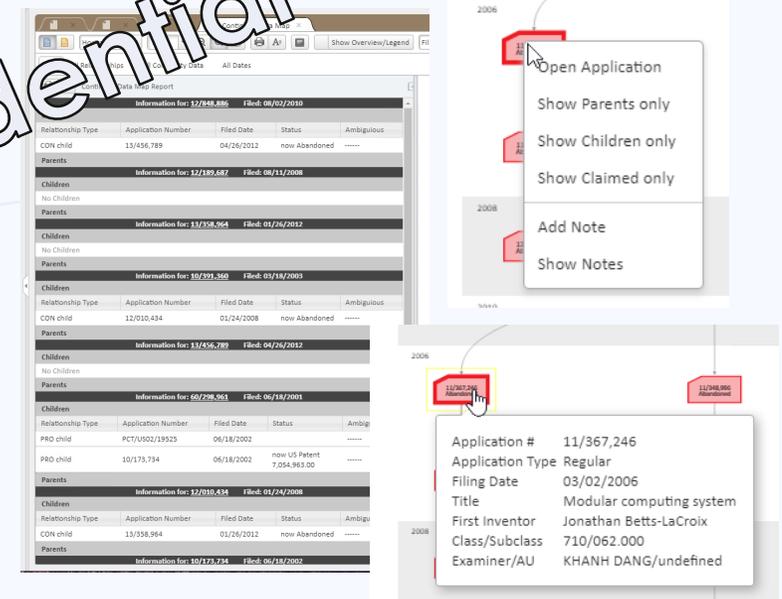- Filing date
- Relationship type
- Continuity type
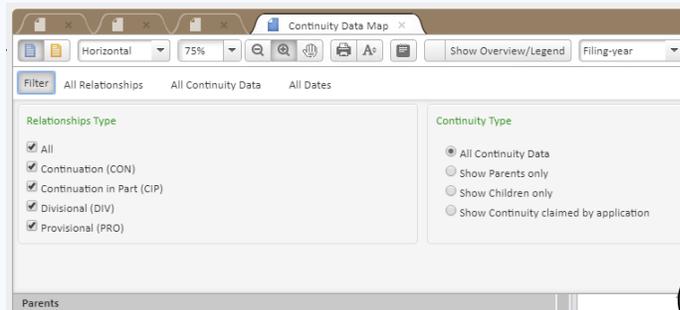
Map Overview

- For large maps allowed for easier navigation
- Toggle between overview and legend
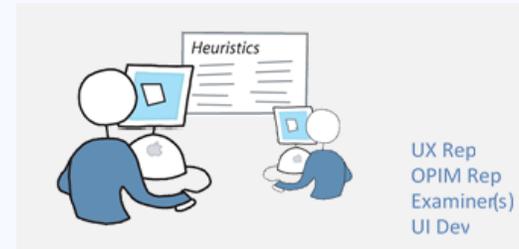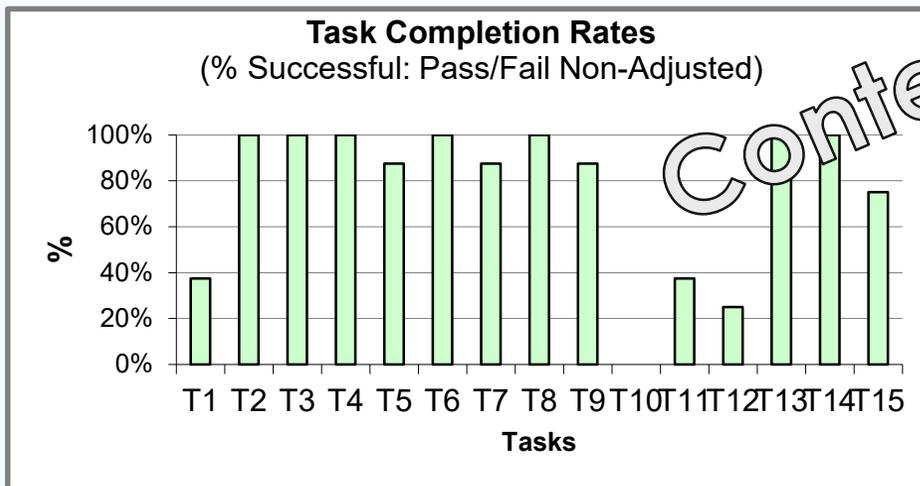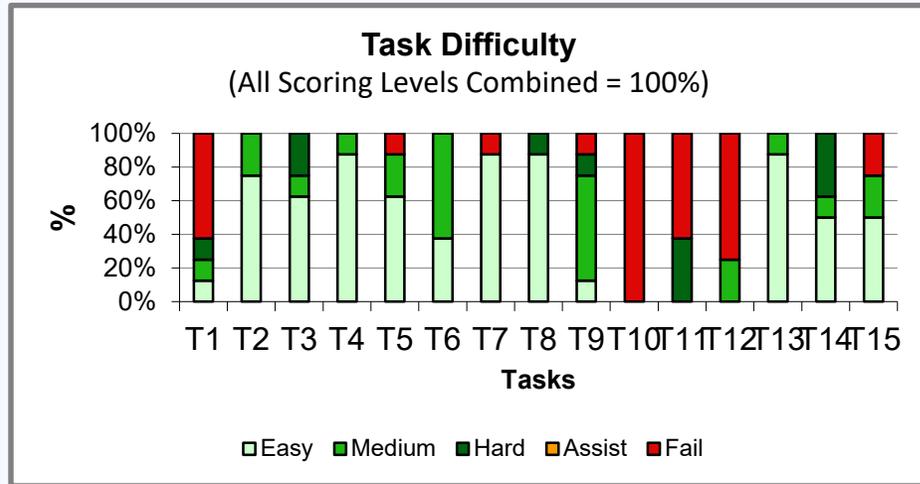- Collapsible to allow more space for map view

For accessibility:

- Table view of graphical map had same information as graphical map
- Context (right-click) menus for functionality and detailed information

Patent Examination System: Test Process/Results

Task Difficulty
(All Scoring Levels Combined = 100%)

Legend: □ Easy ■ Medium ■ Hard ■ Assist ■ Fail

Task Completion Rates
(% Successful: Pass/Fail Non-Adjusted)

- Facilitated usability session with users

- Created recommendations for improvements based on the metrics from the test results

- Presented findings to stakeholders to gain approval/direction

- Incorporated recommendations into new designs as appropriate

Heuristics

UX Rep
OPIM Rep
Examiner(s)
UI Dev

Content Confidential

Digital Transformation Project: Gateway Portal

Goal: Multi year project to transform B2B application. Establish an end client on-line user experience that is effective, appealing, and is acceptable by an appropriate sample of Intermediary firms that are direct clients

- Effective – end client "users" information needs are met with relative ease use.

- Appealing – end clients find the on-line experience appealing both graphically and through relative ease of use.

- Intermediary acceptance – minimally, the website can be branded with the intermediary's logo and color scheme and the intermediary finds the user experience design acceptable

Key Design Processes:

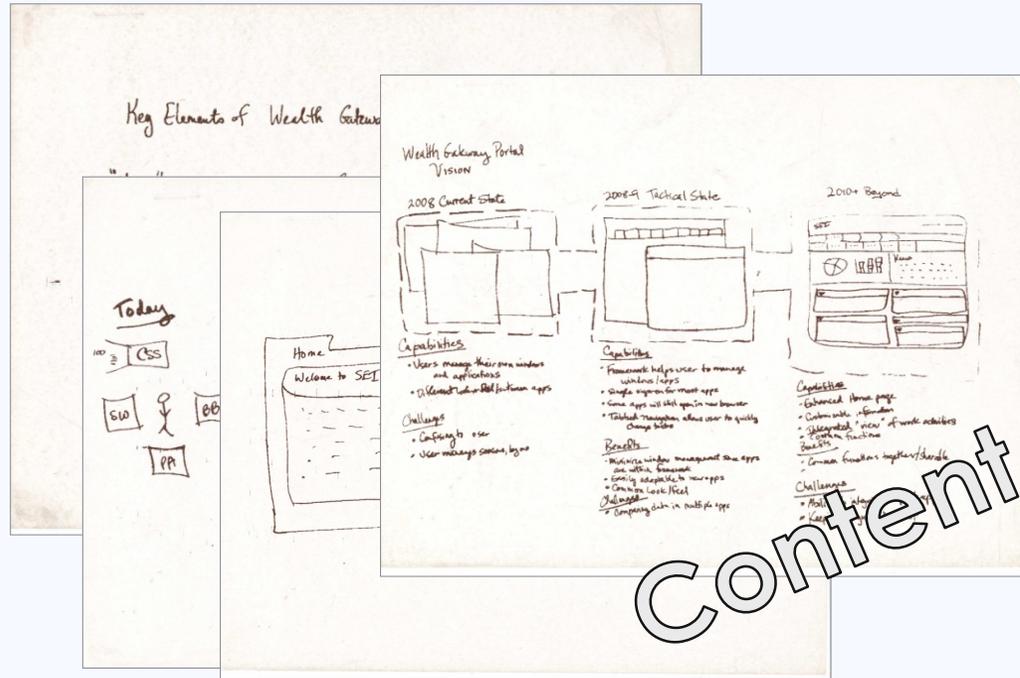- Discovery/User Research
- Design

Design Role:

- Designer and Researcher providing research and design

Project Objectives

- The Gateway portal will provide a portal into the applications related to the mainframe
  - Provide entry for front office users to access web based provider applications
  - Implement common Branding
  - Promote a common behavior across all applications
  - Bridge gap between current application and future global application design
  - Integrate applications through a single point of entry, e.g., portal with single sign-on
  - Improve usability of applications and user satisfaction
  - Win and maintain business

Gateway Portal – Discovery/User Research Phase

Old systems were not connected. They requiring separate logins and did not have a consistent brand or experience.

Interviewed various clients and did one-on-one ethnographic research to define their points of pain and design needs.

Gateway Portal - Design Process

- Held brainstorming sessions with stakeholders
- Identified key elements of system
- Created high level sketch of home page and various detailed pages

- Created draft wireframes and overall navigation structure for application
- Final wireframes produced from iterative design sessions held with stakeholders

Gateway Portal Vision - Results

An improved End Client experience

- Enhanced user interface with improved navigation
- Bank branding flexibility
- Quick page responsiveness

An improved Intermediary experience

- Enhanced user interface with improved navigation
- A single point-of-entry to all relevant company applications
- Household and Book of Business Reporting
- Emphasize Asset Management capabilities
- Broad-based content delivery
- Reduced dependence on green screens
- Role-Based entitlements

Feedback/Take Aways

- Positive feedback from both prospective clients and current clients
- Kept current clients during re-contracting (95%)
- Won clients from closest competitor
  - Two largest clients of competitor converted to system
  - High level of user satisfaction
  - Sales said the newly designed system was **the most important factor** in our winning new business in the last 2 years

Website Redesign: Public Standards Organization

Goal: Project to modernize and streamline the website for a public standards organization to improve the efficiency of clients.

Key Design Processes:
- Discovery/Strategy
- Research
- Design

Project Objectives

Organize information to make it more findable and usable for clients

- Improve usability of website and user satisfaction
- Provide consistency and professional customer experience
- Deliver a personalized experience for clients
- Support collaboration between organization and clients
- Promote unique products and services

Design Role:

- Principal Designer and Researcher on key design areas, facilitating user research

Primary Design Responsibilities & Deliverables:

- Collaborating with stakeholders to identify requirements and solutions
- Working with dev team(s) and business owners in Agile environment
- Writing user stories based on analysis and research into user needs
- Conducting user research to gain understanding of user needs
- Creating overall information architecture and content strategy for new website
- Creating wireframes for all page types within website for use with new branding

Public Standards Organization: Discovery Phase

Discovery Phase

- Worked with marketing director

- Held interviews with stakeholders

- Identified SWOTs:
  - Strengths
  - Weaknesses
  - Opportunities
  - Threats

- Created user profiles/personas for key system users

Public Standards Organization: Research

- Facilitated workshops with project team/stakeholders to understand current processes and desired system functionality

- Audited content inventory to identify content groups and uncover metadata available for filtering and grouping

- Conducted workshop with stakeholders to gain insights on each stakeholder's mental model of the content organization which also sparked discussion and further refinement of requirements

- Revised information architecture to reflect content inventory findings and support the refined requirements
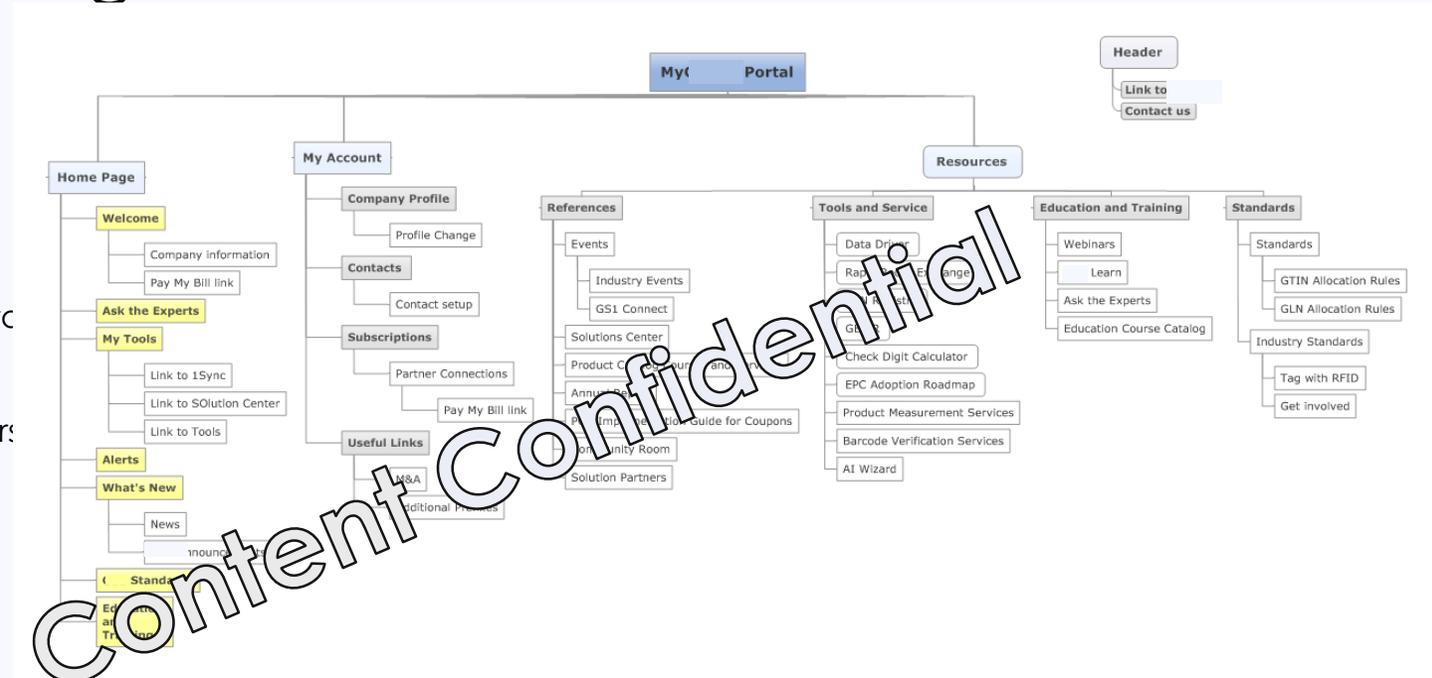
Public Standards Organization: Design
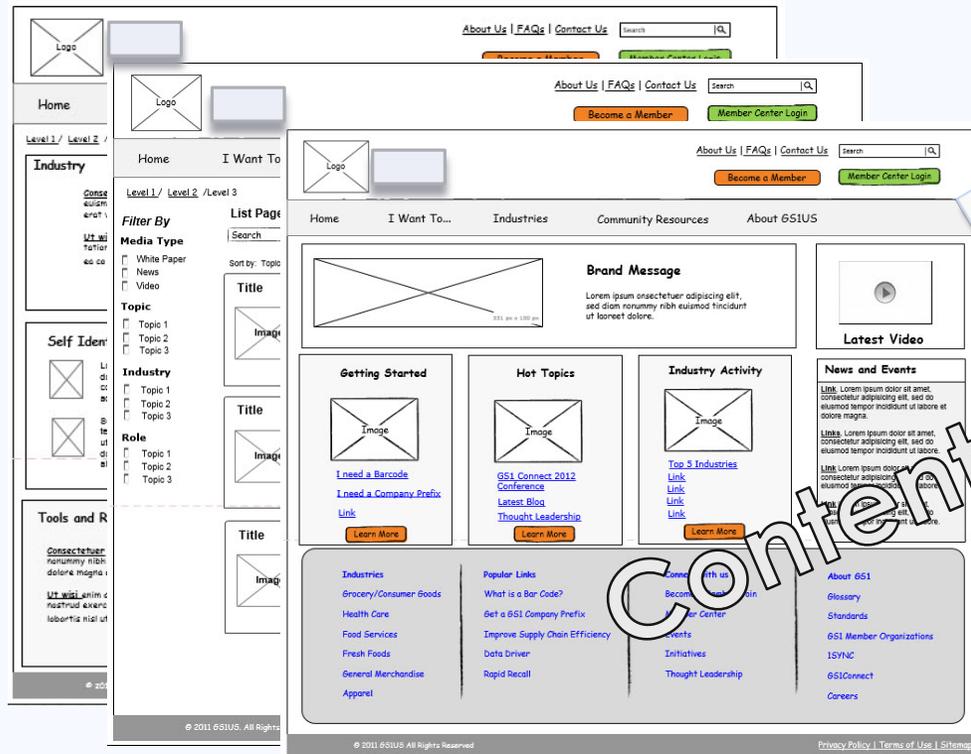
Created draft wireframes of home and to improve the design of the content and provide flexibility for content creators

Sample pages that incorporates new company branding and content

Public Standards Organization: Responsive Designs
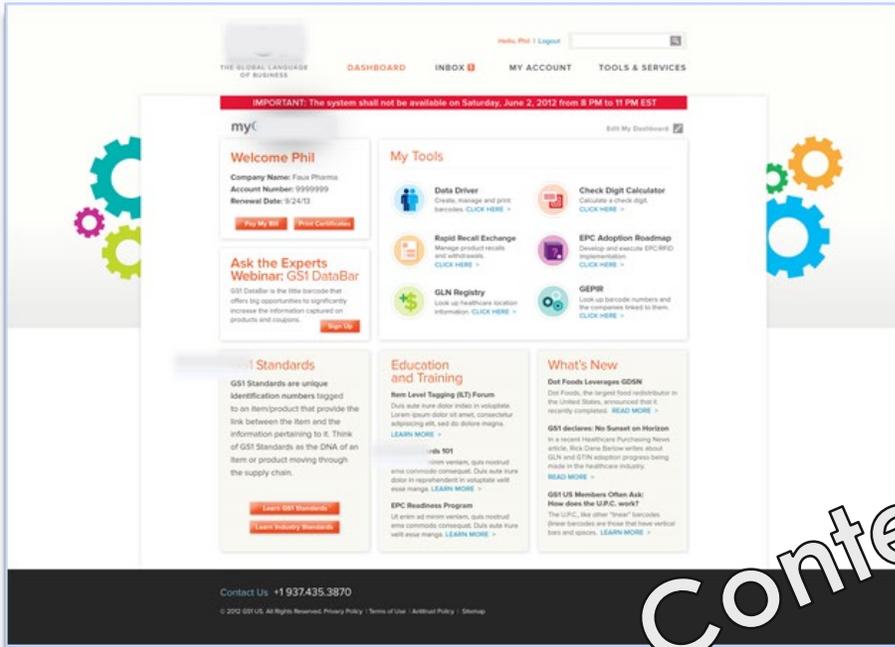

Computer

Tablet
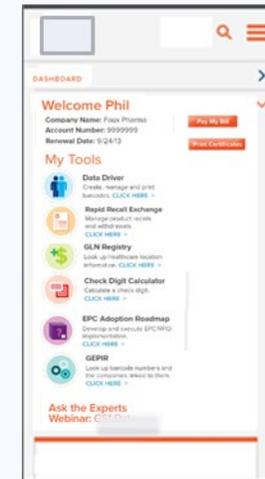
Mobile

Sample pages that incorporates new company branding and content across multiple devices

Usability Study: Design Validation

Goal: To test design across international clients, identifying design and usability issues and providing recommendations for implementation

Key Design Processes:

- Research

- Design Recommendations

Project Objectives

- Identify major themes for each alternative

- Determine the usability of major functionality

- Provide recommendation on design changes

Design Role:

- User Researcher

Primary Design Responsibilities & Deliverables:

- Designing testing plan including identifying task scenarios

- Recruiting, screening and scheduling test facilities and participants

- Analyzing test results

- Making recommendations based on results from data

Design Validation: Test Planning

Test Planning
Document to define the testing process, the required resources to complete the plan and the testing schedule

Participant Screening
Scripted screener for identifying qualified participants for the test.

Facilitation Guide
Scripted facilitation guide that includes introduction, standard task descriptions and closing

Design Validation: Testing Process

Study Background/Structure

- In person moderated test structure

- Used TechSmith Morae software to capture session data

- One-on-one sessions with 33 participants from US and UK

- Collected data on:
  - Task Difficulty
  - Errors
  - Time on Task
  - Completion Rate
  - User Satisfaction
  - Usability
  - Learnability

User Test Process

US Testing
Philadelphia
19 participants
3 days

Refinements

UK Testing
London
14 participants
2 days

Refinements

Final Design

Tasks
Find market value
Find message
Find/print statement
Send message
Find transactions
Find tax info / find % FI
Export data
Save file to your folder
Customize your links
Customize homepage
Explore

Testing
- One –on-one / one hour
- Task driven
- Assistance given as needed
- Talk method
- Rate difficulty
- Rate overall "satisfaction"

Morae software
-Video
-Voice
-Mouse movement
-Time
-Survey
-Observer tagging
- Analysis
-Statistics

Observation
-Sound proof room
-One way glass
- Audio, video
-Observation software
- Tag tasks - markers
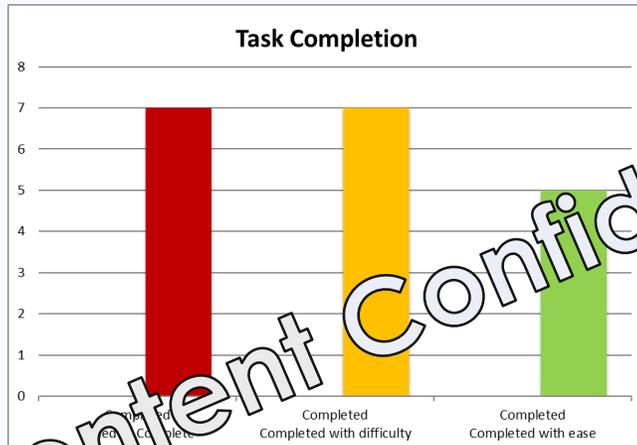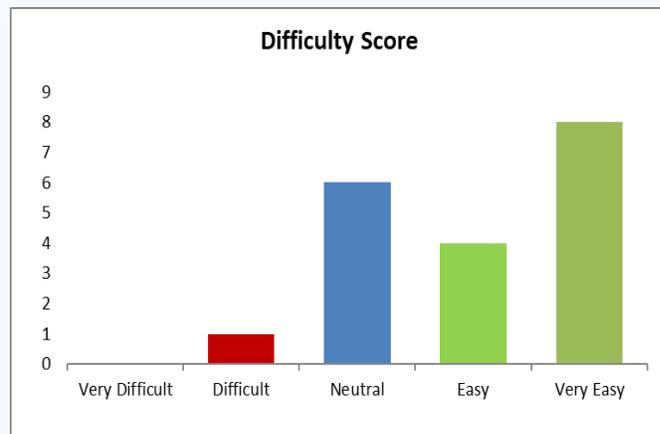
Examples:
Instructions
Easy
Ouch
Soft

Content Confidential

Design Alternative: Research Results for Single Task

Task 7 –Find tax information (gains/losses)

- Users clicked on Statements and Tax but couldn't find tax info – information was in third level of navigation

Difficulty Score

Task Completion

Time on Task (in seconds)

Content Confidential
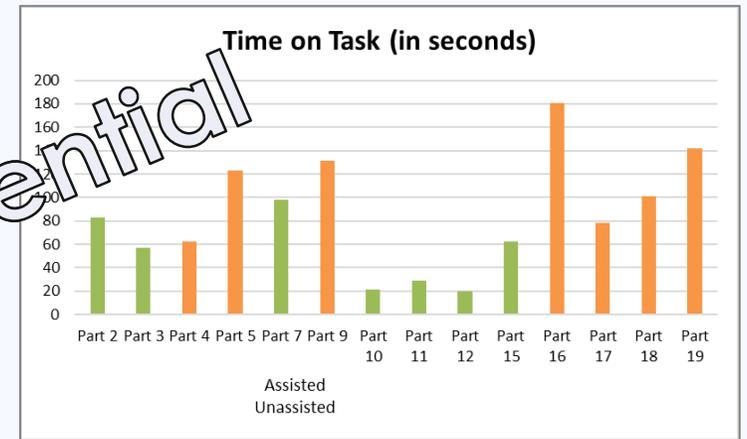
Task Difficulty
- Task difficulty was similar for many of the tasks, however, the key tasks of navigation and communication was easier for Design Alternative 1.

Task Completion
- Task Completion was much better for Design Alternative 2. However, some tasks were not completed for either alternative.
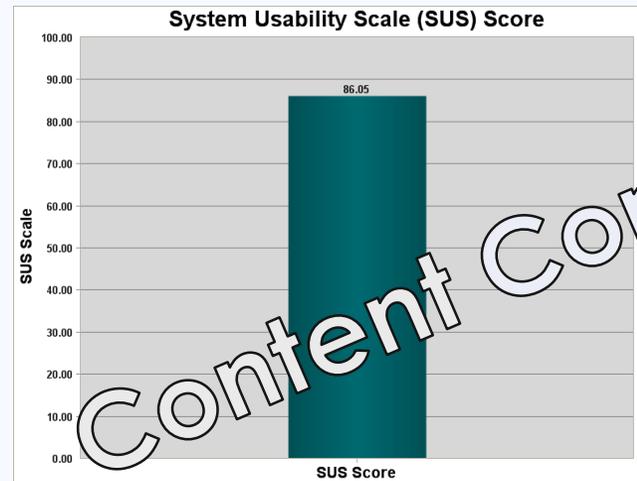
Time on Task
- Task time varied greatly with 5 people never completing task so are not included
- Showing Assisted versus Unassisted

Design Validation: Key Findings & Recommendations

Key Findings

- Easy was most common theme
- Overall SUS rating of 86% reinforced by the user comments of easy and user friendly

System Usability Scale (SUS) Score — 86.05

Design Change Recommendation

Key Issue / Underlying Cause	Proposed Design Change
Task 6: Account activity not found Underlying cause – secondary/tertiary navigation is not easily visible	Redesign navigation for visibility Make visual indicator of sub-tab more prominent Make visual indicator of main tab more prominent
Task 8: Tax related information not found Underlying cause: users did not see the tax account information	Redesign navigation for visibility Make visual indicator of sub-tab more prominent Make visual indicator of main tab more prominent
Task 9: Copy file to folders not easily found / understood Underlying cause: too many buttons on that page – not well organized – too crowded	Relocate buttons in one location (top right) – possibly switch to text links only – stacked vertically
Task 5: Send Message (to advisor) link not found Underlying cause: user expected it within communication section	Include within messages pages
Task 7: Export data not easily found / understood Underlying cause: not many users do this today	While not relevant to underlying cause – will relocate export button to be closer to table of data Include instructions in HELP section
Task 11: Homepage portlet user priority Underlying cause: user preference	Change default portlets on homepage to match most important information to user

Additional Samples - Mobile Design Wireframes

Key Design Processes:

- Research

- Design

Project Samples

From the following projects

- Job Search

- Ecommerce

Design Role:

- UX Designer

- User Researcher

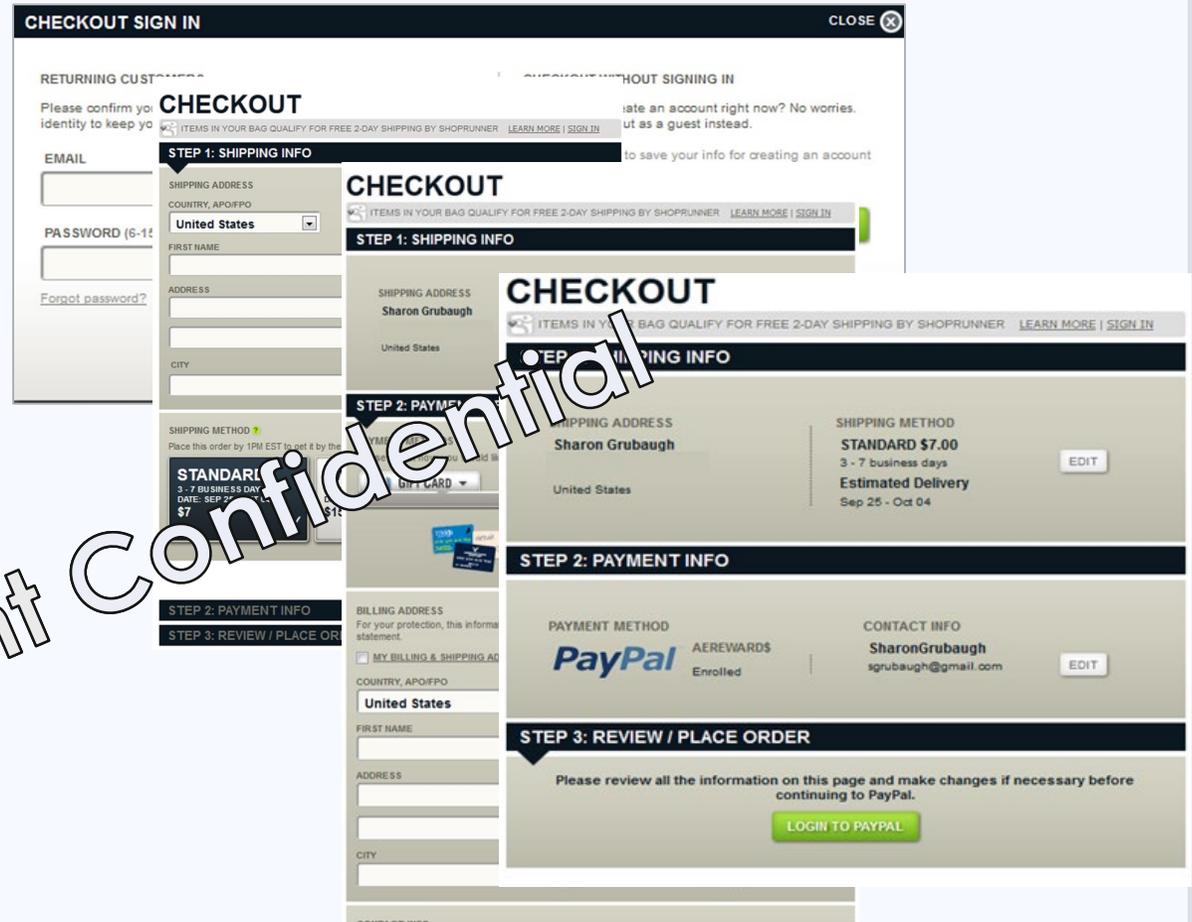**Primary Design Responsibilities & Deliverables:**

- Create compelling mobile designs for various applications

Content Confidential

Mobile Design

Low fidelity wireframe samples – search job opportunities

High fidelity wireframes – ecommerce

Thank you for taking the time to review!

Sharon Grubaugh

UX Design Strategist/Consultant

sharongrubaugh@verizon.net | (610) 864-0144